

**REMARKS**

Reconsideration and withdrawal of the rejections of this application are requested. The Examiner is thanked for indicating allowable subject matter.

**I. STATUS OF CLAIMS AND FORMAL MATTERS**

Claims 5, 10-14, 17, 19-21, 35, 36, 43 and 51 are under examination in this application. Claims 13 and 19 are amended. No new matter has been added.

It is submitted that these claims are and were in full compliance with the requirements of 35 U.S.C. §112. The herein amendments of and additions to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112; but rather, the amendments are made simply for clarification and to round out the scope of protection to which Applicants are entitled. Furthermore, it is explicitly stated that the herewith amendments should not give rise to any estoppel, as the herewith amendments are not narrowing amendments.

**Claim Objections**

Claims 37-42 were objected to under 37 C.F.R. 1.75(c) as allegedly being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 37-42 are cancelled, obviating the objection.

**II. THE REJECTIONS UNDER 35 U.S.C. § 112, 1<sup>st</sup> PARAGRAPH, ARE OVERCOME**

Claims 1-4, 10-12, 14, 17, 35-43 and 51 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking adequate written description. The Office Action argues that the claims include a broad genus that encompasses a large number of alterations to the retrotransposon of SEQ ID NO:3. It is assumed that the discussion of hybridization on page 4 of the Office Action was included inadvertently, as the claims under examination had no hybridization language in them. In addition, the only remaining percent similarities to SEQ ID NO:3 that are currently recited in the claims are 95% and 97%. It would appear from the paragraph of the Office Action bridging pages 7 and 8 that part (b) of claim 12 is the focus of this written description rejection. As all of the rejected claims depend directly or indirectly from claim 12, our discussion focuses on claim 12b.

As discussed in the paragraph beginning on page 8, line 11, of the specification, one object of the present invention is a transposable element for introducing a desired DNA sequence into the genome of a cell using the LTR sequences of SEQ ID NO:3 with an integration factor,

preferably encoded by the nucleotide sequence within the POL region of the retrotransposon. An example of such a retrotransposon is provided in Figure 32.

Enclosed is a copy of Genbank entry AF007776, which corresponds to SEQ ID NO:3 and shows the features of the retrotransposon (also described in Examples 2 and 3 and Figure 4 of the application). The two LTRs are at nucleotide positions 1 to 280 and 6147 to 6426 of SEQ ID NO:3. The POL region is at nucleotides 1373 to 6103, and the GAG region is at nucleotide position 398 to 1372. Therefore, the LTR and POL regions comprise the major portion of SEQ ID NO:3, and a nucleotide having at least 95% identity to those regions should meet the written description requirement of Section 112.

Claims 19-21 and 44-50 were also rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking adequate written description. The sequence described by accession number AF007776 is already part of the application as SEQ ID NO:3. Claim 19 has been amended to recite the sequence, rather than the accession number, obviating the rejection of claims 19-21.

Claim 13 was rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking adequate written description. As was correctly stated on page 9 of the Office Action, Tca2 is the integrated form of pCal. For clarity, claim 13 has been amended to recite the language of part (a) of claim 12. In other words, claim 13 is directed to a transformed cell with SEQ ID NO:3 or a nucleotide having at least 95% sequence similarity to SEQ ID NO:3 integrated into its genome.

Applicants were in possession of the claimed invention at the time of filing. Therefore, reconsideration and withdrawal of the written description rejections are requested.

### **III. THE REJECTIONS UNDER 35 U.S.C. § 112, 2<sup>nd</sup> PARAGRAPH, ARE OVERCOME**

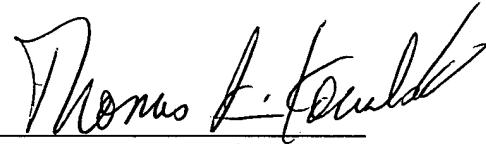
Claims 4 and 13 were rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite. Claim 4 has been cancelled and claim 13 has been amended such that it no longer recites “TCa2.” In view of these amendments, reconsideration and withdrawal of the rejections under 35 U.S.C. §112, second paragraph, are requested.

**CONCLUSION**

Applicants believe that the application is in condition for allowance, and favorable reconsideration of the application and prompt issuance of a Notice of Allowance are earnestly solicited.

Respectfully submitted,  
FROMMER LAWRENCE & HAUG LLP

By:



Thomas J. Kowalski  
Reg. No. 32,147

Anne-Marie C. Yvon  
Reg. No. 52,390  
(212) 588-0800